

**SCOURGE® INSECTICIDE WITH SBP-1382/PB
4%+12% FORMULA II**

MSDS Version 3.4

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name SCOURGE® INSECTICIDE WITH SBP-1382/PB 4%+12% FORMULA II
Chemical Name Mixture; a.i.'s, resmethrin, piperonyl butoxide
Synonym
MSDS Number 191
Chemical Family
Chemical Formulation
EPA Registration No. 432-716
Canadian Registrat. No.

Bayer Environmental Science
95 Chestnut Ridge Road
Montvale, NJ 07645
USA

For Product Use Information: (800)331-2867 Monday through Friday(CRLF) 8:00AM-4:30PM(CRLF) For Medical Emergency contact DART: (800) 334-7577 24 Hours/Day(CRLF)
For Transportation Emergency CHEMTREC: (800) 424-9300 24 Hours/Day

Product Use Description A ready to use synthetic pyrethroid for effective adult mosquito, midge and black fly control. This product has a restricted use classification and can be used only by Certified Applicators or persons under the supervision of such applicators.

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component Name</u>	<u>CAS No.</u>	<u>Concentration % by Weight</u>	
		Minimum	Maximum
Resmethrin	10453-86-8	4.1400	
Piperonyl butoxide	51-03-6	12.4200	
Other ingredients, including:		83.4400	
NAPHTHALENE	91-20-3		0.6200

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SECTION 3. HAZARDS IDENTIFICATION

NOTE: Please refer to Section 11 for detailed toxicological information.

Emergency Overview

Caution. Keep out of the reach of children. Hazard to humans and domestic animals. This pesticide is highly toxic to fish.

Physical State

liquid

Odor

mild solvent

Appearance

golden, amber

Immediate Effects

Eye

Avoid contact with eyes.

Skin

Harmful if absorbed through the skin. Avoid contact with skin or clothing. Wash thoroughly with soap and water after handling.

Ingestion

Harmful if swallowed.

Medical Conditions Aggravated by Exposure

None known

Signs and Symptoms

Symptoms might include transient headache, dizziness, stuffy or runny nose and scratchy throat.

SECTION 4. FIRST AID MEASURES

Eye

Flush eyes with plenty of water. Get medical attention if irritation persists.

Skin

Wash with soap and plenty of water. Get medical attention.

Ingestion

Call a doctor or get medical attention. Do not induce vomiting. Do not give anything by mouth to an unconscious person. Avoid alcohol. This product contains aromatic petroleum solvent. Aspiration may be a hazard.

Note to Physician

This product contains a synthetic pyrethroid. This product contains a petroleum solvent. If ingested and vomiting has not occurred, emesis should be induced with supervision. Keep patient's head below hips to prevent aspiration. If symptoms such as loss of gag reflex, convulsions or unconsciousness occur before emesis, gastric lavage using a cuffed endotracheal tube should be considered.

Do not administer milk, cream or other substances containing vegetable or animal fats, which enhance the absorption of lipophilic substances. If localized paresthesia develops, the site should be thoroughly washed with soap and water. Cold cream or a moisturizing cream has been successful in diminishing

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the sensations associated with localized paresthesia.

SECTION 5. FIRE FIGHTING MEASURES

Flash Point	> 93 °C / > 199 °F Method: Tagliabue Closed Cup
Suitable Extinguishing Media	carbon dioxide (CO2), dry chemical, foam
Fire Fighting Instructions	<p>As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved (or equivalent) and full protective gear. Keep upwind. Isolate hazard area. Avoid inhalation of smoke and fumes. Use water or foam to reduce fumes. Do not touch spilled material. If possible, move containers from area. Extinguish only if flow can be stopped. Use flooding amounts of water as a fog. Cool containers with flooding amounts of water from as far a distance as possible. Avoid breathing vapors.</p> <p>FLAMMABILITY CLASSIFICATION/RATING: NFPA/OSHA Class: IIIB NFPA Rating (Fire): 1</p>
Dust Explosion Class	Not applicable

SECTION 6. ACCIDENTAL RELEASE MEASURES

General and Disposal	<p>Use proper protective equipment to minimize personal exposure (see Section 8). Take all necessary action to prevent and to remedy the effects of the spill. Ensure that the disposal is in compliance with Federal or local disposal regulations. See Section 13 for any applicable Reportable Quantity (RQ) and other federal regulatory information.</p>
Land Spill or Leaks	<p>Small Spill: Absorb with an inert absorbent material such as granular clay, saw dust or pet litter. Sweep up carefully while avoiding the formation of a dust cloud. Place in an approved chemical waste container for disposal. Rinse spill area with small amount of soapy water. Contain and absorb the rinsate with inert absorbents and place into the same disposal container. Area can be washed with water to remove the last trace residue. Do not allow water to contaminate water supplies or sewers.</p> <p>Large Spill: Eliminate all ignition sources. Stop leak if you can do so without coming into contact with spilled material. Dike far ahead of liquid spill for later disposal. All equipment used to clean up spill should be grounded. Prevent entry into waterways, sewers, basements or confined areas. Inform appropriate authorities immediately if contamination occurs. Contact Bayer for further assistance if necessary.</p>

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SECTION 7. HANDLING AND STORAGE

Handling Procedures	Avoid contact with skin, eyes and clothing.
Storing Procedures	Do not contaminate water, food, or feed by storage or disposal. Store in original container. Keep in a locked storage area.
Work/Hygienic Procedures	Wash thoroughly with soap and water after handling.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls	Control airborne concentrations below the exposure guidelines. Local exhaust ventilation may be necessary.				
Eye/Face Protection	safety glasses splash goggles or face-shield				
Body Protection	Chemical-resistant gloves (Neoprene, Nitrile, PVC) other protective clothing to avoid skin contact				
Respiratory Protection	Ensure adequate ventilation. If not adequate, use a chemical cartridge-type respirator approved by the National Institute of Occupational Health and Safety.				
General Protection	Eye wash facility and safety shower should be available.				
Exposure Limits					
NAPHTHALENE	91-20-3	ACGIH	TWA		10 ppm
		ACGIH	STEL		15 ppm
		NIOSH	REL	10 ppm	50 mg/m3
		NIOSH	STEL	15 ppm	75 mg/m3
		OSHA Z1	PEL	10 ppm	50 mg/m3
		OSHA Z1A	TWA	10 ppm	50 mg/m3
		OSHA Z1A	STEL	15 ppm	75 mg/m3
		US CA OEL	TWA PEL	10 ppm	50 mg/m3
		US CA OEL	STEL	15 ppm	75 mg/m3

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	golden, amber
Physical State	liquid
Odor	mild solvent

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pH	Not applicable
Vapor Pressure	Not available
Vapor Density (air = 1)	Not available
Specific Gravity	0.87 at 22 °C
Bulk Density	7.23 lb/gal at 22 °C
Boiling Point	Not available
Melting/Freezing Point	Not available
Solubility (in water)	insoluble
Solubility (in Solvent/Oil)	Not available
Minimum Ignition Energy (mj)	Not available
Minimum Explosion Conc. (MEC)	Not available
Viscosity	34.3 cp 21 °C
Other Information	EVAPORATION RATE (BUTYL ACETATE = 1): Not available LIMITED OXYGEN CONCENTRATION (LOC): Not available

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability	Stable
Conditions to Avoid	extreme heat sources of ignition
Incompatibility	strong reducing agents strong oxidizing agents
Hazardous Products of Decomposition	Decomposition Type: thermal carbon monoxide carbon dioxide (CO ₂)

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**Hazardous
Polymerization
(Conditions to avoid)**

Will not occur

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity Rat: 2,700 mg/kg
Slightly toxic.

Acute Dermal Toxicity Rabbit: > 2,000 mg/kg
Slightly toxic.

Acute Inhalation Toxicity Rat: > 2.64 mg/l 4 h
Practically non-toxic.

Skin Irritation Rabbit: Slightly irritating

Eye Irritation Rabbit: Non-irritating.

Sensitization Guinea pig: Non-sensitizing

THE ABOVE ACUTE TOXICITY DATA WERE DEVELOPED WITH: Scourge Insecticide with SBP-1382/Piperonyl Butoxide 18% + 54% MF Formula II (EPA Reg. No. 432-667), which contains 18% Resmethrin and 54% Piperonyl Butoxide.

NOTE: The severity classifications listed above are those of Bayer, and particularly for eye irritation, may not always coincide with EPA-mandated Precautionary Statements.

THE TOXICITY DATA IMMEDIATELY BELOW WERE DEVELOPED WITH: resmethrin and piperonyl butoxide, the active ingredients

Sub-Chronic Toxicity The NOEL established for resmethrin in a 90-day inhalation study with rats was 0.1 g/m³ or 0.1 mg/L. The NOEL for resmethrin was 10 mg/kg/day in the diet when fed to dogs for 180 days. Rats tolerated diets containing 5000 ppm of piperonyl butoxide without adverse effects for 17 weeks.

Chronic Toxicity Resmethrin was not considered to be oncogenic based on chronic feeding studies conducted in rats and mice.

A statistically significant increase in the number of benign liver tumors appeared in mice fed piperonyl butoxide technical at doses which far exceed any anticipated daily human intake. Independent and industry toxicological experts who have reviewed the data agree that the findings of the study do not indicate a health risk to human beings.

Assessment Carcinogenicity

ACGIH

NAPHTHALENE

91-20-3

Group A4

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NTP

NAPHTHALENE

91-20-3

IARC

Piperonyl butoxide

51-03-6

3

OSHA

None

Reproductive & Developmental Toxicity

No effects on reproductive parameters were observed when diets containing up to 500 ppm resmethrin were fed to rats over two successive generations. Resmethrin is not considered to be teratogenic based on studies conducted in rabbits and rats.

Reproductive performance and offspring development in rats were unaffected when piperonyl butoxide was fed at dietary concentrations of up to 1000 ppm over two successive generations. Piperonyl Butoxide was not considered to be fetotoxic or teratogenic based on a study in rabbits.

Neurotoxicity

Resmethrin is not considered to be a neurotoxin based on rat feeding studies conducted for up to 32 weeks.

Mutagenicity

Resmethrin is not considered to be mutagenic based on in vitro studies conducted with bacteria and yeast.

SECTION 12. ECOLOGICAL INFORMATION

Acute and Prolonged Toxicity to Fish

Scourge
Rainbow trout
LC50: 2.40 ppb
Exposure Time: 96 h

Scourge
Bluegill sunfish
LC50: 13.00 ppb
Exposure Time: 96 h

Scourge
Sheepshead minnow
LC50: 8.80 ppb
Exposure Time: 96 h

Acute Toxicity to Aquatic Invertebrates

Scourge
Daphnia
LC50: 0.10 ppm
Exposure Limit: 48 h

Scourge
Penaeus Shrimp
LC50: 1.25 ppb

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Exposure Limit: 96 h

Scourge
American Oyster
LC50: 1.79 ppm
Exposure Limit: 96 h

Toxicity Other Non Mammal Terr. Species

Acute Oral
Resmethrin
California Quail
LD50: > 2,000 mg/kg

Resmethrin
Japanese quail
LC50: > 5,000 ppm

Resmethrin
Mallard duck
LC50: > 5,000 ppm

Environmental Precautions

This pesticide is highly toxic to fish. For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below mean high water mark. Drift and runoff from treated sites may be hazardous to fish in adjacent waters. Consult your State's Fish and Wildlife Agency before treating such waters. Do not contaminate water by cleaning of equipment or disposal of equipment wastewaters.

Ecological Information

Dietary administration of resmethrin at 300 ppm for 23 weeks produced no adverse effects on reproduction in Bobwhite Quail and in Mallard Duck.

SECTION 13. DISPOSAL CONSIDERATIONS

General Disposal Guidance

Do not contaminate water, food, or feed by storage or disposal.

Pesticide Disposal: Wastes resulting from use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal

Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

RCRA Classification

Not Regulated under this Statute

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SECTION 14. TRANSPORT INFORMATION

Proper Shipping Name, Non-Bulk: Not DOT Regulated

SECTION 15. REGULATORY INFORMATION

US Federal

EPA Registration No. 432-716

TSCA list

Piperonyl butoxide 51-03-6

NAPHTHALENE 91-20-3

TSCA 12b export notification

None

SARA Title III - section 302 - notification and information

None

SARA Title III - section 313 - toxic chemical release reporting

Resmethrin 10453-86-8 1.0%

Piperonyl butoxide 51-03-6 1.0%

NAPHTHALENE 91-20-3 1.0%

US States Regulatory

CA Prop65

This product does not contain any substances known to the State of California to cause cancer.

US State right-to-know ingredients

Resmethrin 10453-86-8

Piperonyl butoxide 51-03-6

NAPHTHALENE 91-20-3

NJ

NJ

CA, CT, IL, MN, NJ, PA, RI

Canadian Regulations

Canadian Registrat. No.

Canadian Domestic Substance List

Resmethrin 10453-86-8

Piperonyl butoxide 51-03-6

NAPHTHALENE 91-20-3

Environmental

CERCLA

NAPHTHALENE 91-20-3

100 lbs

Clean Water Section 307 Priority Pollutants

NAPHTHALENE 91-20-3

Safe Drinking Water Act Maximum Contaminant Levels

NAPHTHALENE 91-20-3

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International Regulations

EU Classification

NAPHTHALENE

91-20-3

Harmful Dangerous for the
environment

R Phrases

Harmful if swallowed. Very toxic to aquatic organisms, may
cause long-term adverse effects in the aquatic environment.

S Phrases

Keep out of the reach of children. Wear suitable protective
clothing and gloves. This material and its container must be
disposed of as hazardous waste. Avoid release to the
environment. Refer to special instructions/safety data sheets.

European Inventory of Existing Commercial Substances (EINECS)

Resmethrin

10453-86-8

Piperonyl butoxide

51-03-6

NAPHTHALENE

91-20-3

SECTION 16. OTHER INFORMATION

	Health	Flammability	Reactivity	Others
HMIS	1	1	1	D
NFPA	1	1	1	

REVISED SECTIONS:

MSDS REVISION INDICATOR: Company name change.

Print Date: 12/09/2002

Supersedes MSDS, which is older than: 12/09/2002

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